# The DPH Ambulance Diversion Survey: February 1-7, 2001

Massachusetts Department of Public Health

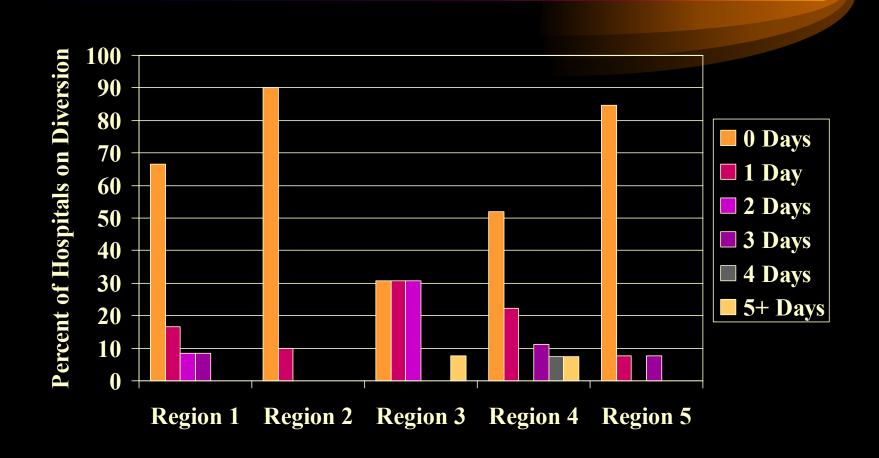
# Ambulance Diversion Survey: Hospital Response Summary

- The survey asked hospitals about their diversion status during the period February 1- February 7
- Responses received from 76 of 77 Hospitals
- 67 either diverted or employed special procedures
- The problem is greatest in EMS Regions 3 & 4
- Occupancy rates vary dramatically depending on definition
- Occupancy rates were highest on days hospitals diverted

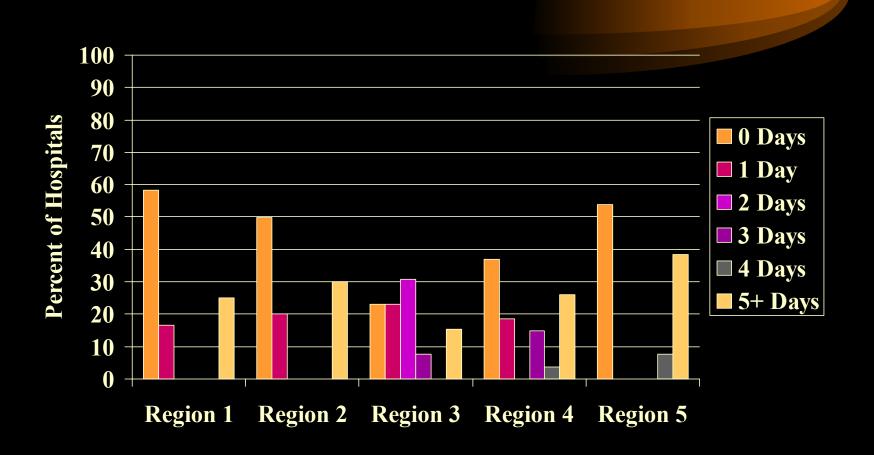
### Diversion Activity Summary for the Week of the Survey

- 44 hospitals either diverted or boarded during week
- 46 of 76 hospitals did not divert.
- 32 of these 46 did not board. 3 hospitals boarded less than 10 patients and 11 boarded more than 10.
- 1 hospital in region 3, 2 hospitals in region 4 and 1 hospital in region 5 requested to go on diversion once but were unable. Another hospital in region 3 requested to go on diversion twice but was unable.
- On one occasion each, 1 hospital in region 3 and 2 hospitals in region 4 came off diversion before ready.

### Hospital Diversion Frequency by Region

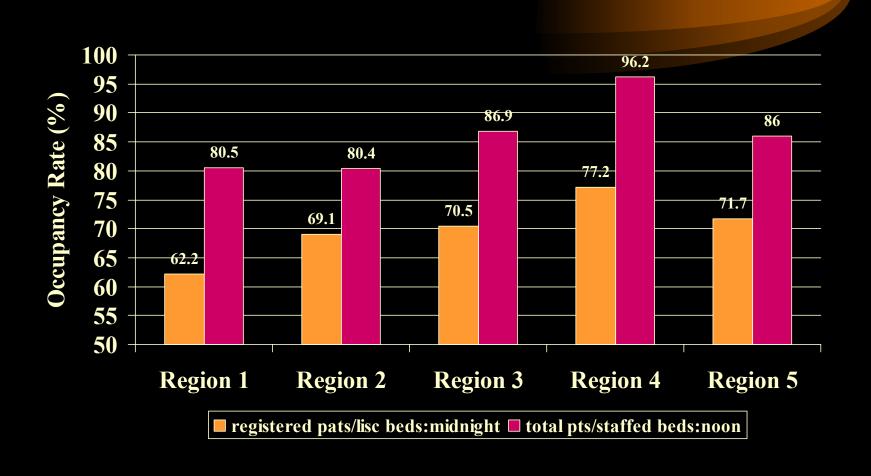


### Hospital Diversion or Boarding Frequency by Region

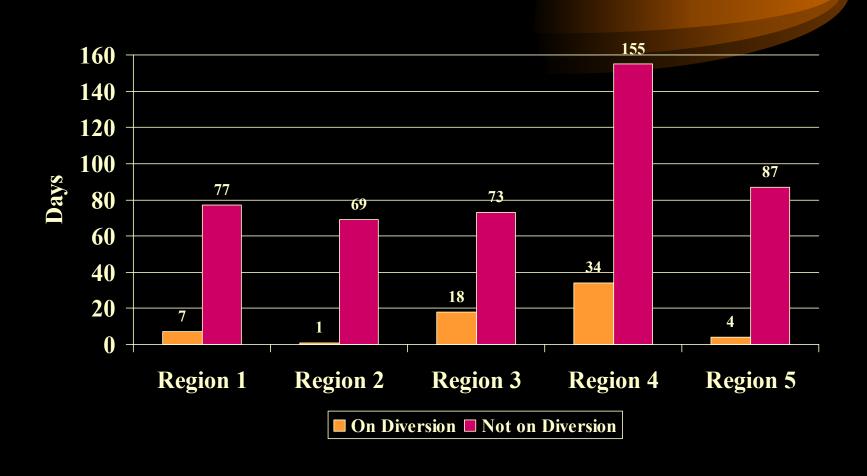


#### Occupancy Rate by Region:

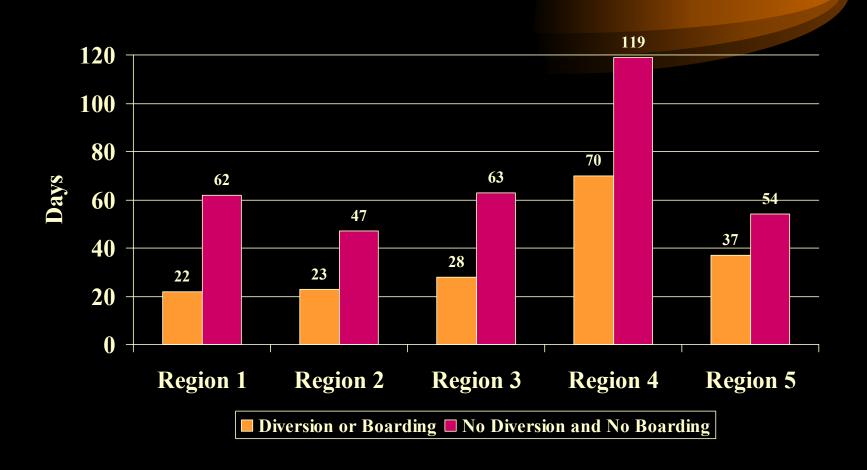
Highest and Lowest Occupancy Measures



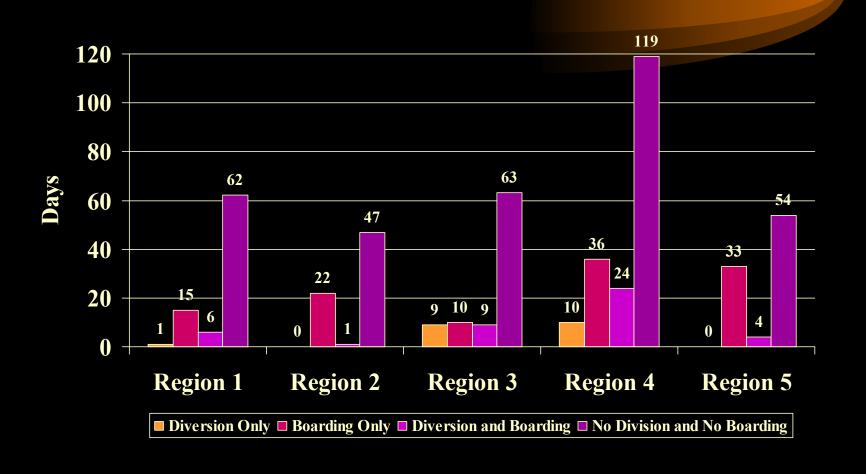
### Diversion by Region: Days with at Least One Hour of Diversion



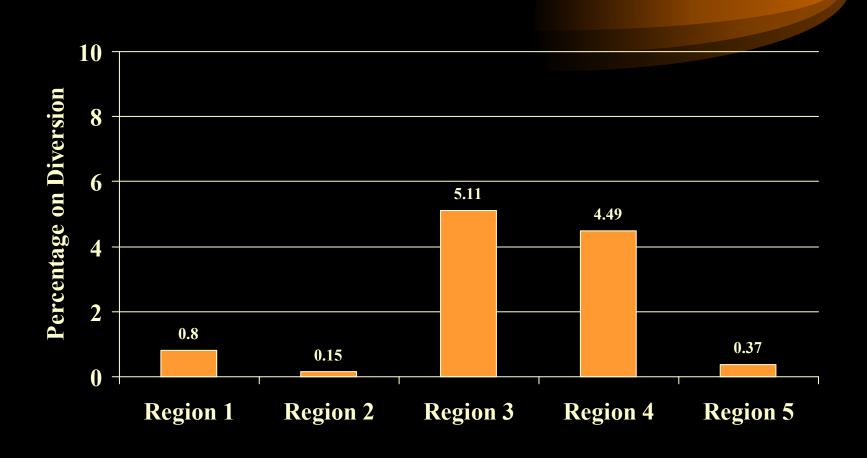
### Diversion by Region: Days with at Least One Hour of Diversion or Boarding



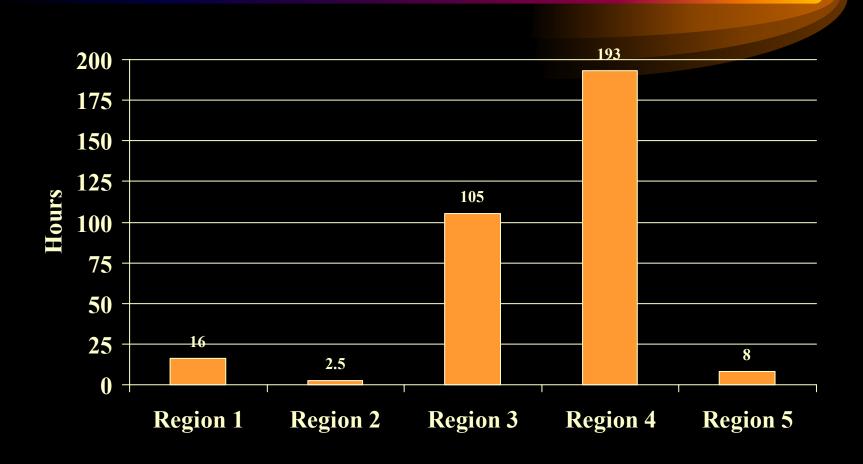
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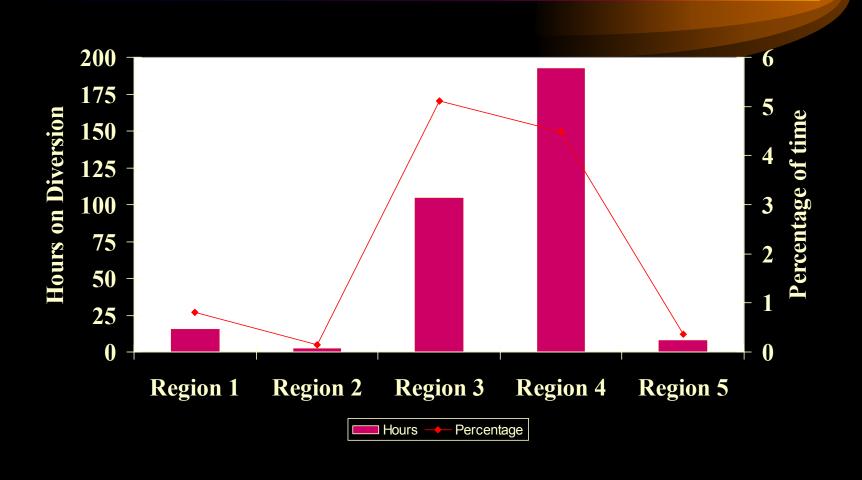
#### Diversion by Region: Percentage of Total Hours Across all Hospitals



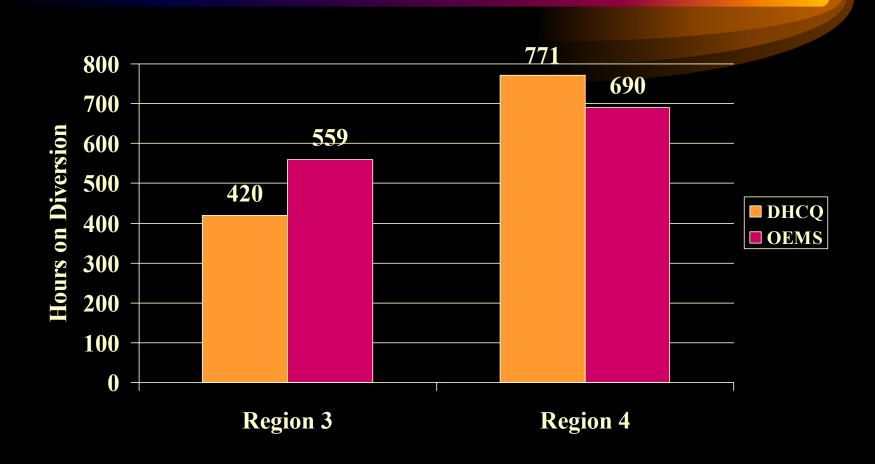
#### Diversion by Region: Total Hours Across all Hospitals



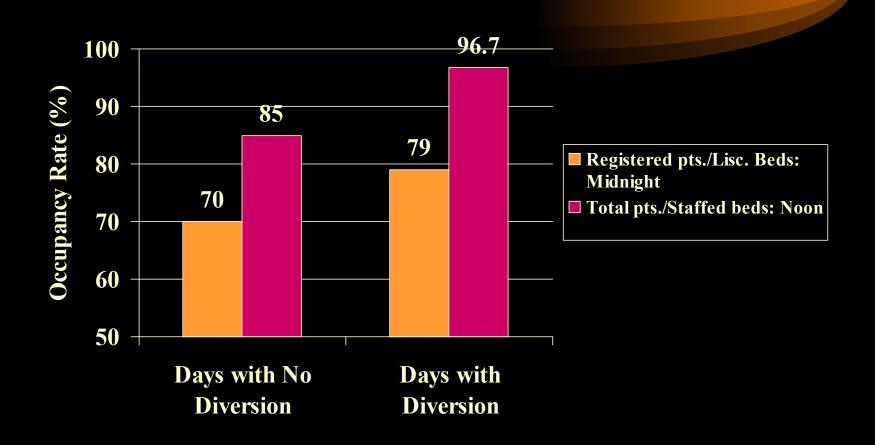
#### Diversion by Region: Total Hours Across all Hospitals



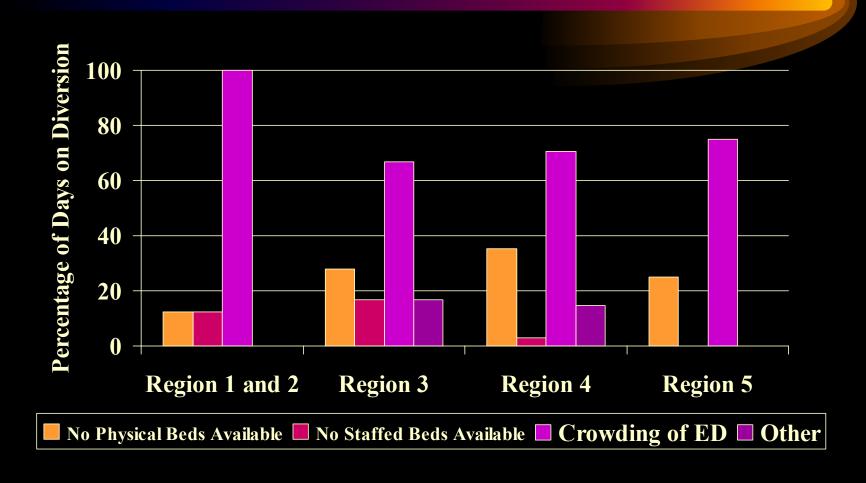
### Projected DHCQ Diversion Time vs. OEMS Data for February 2001



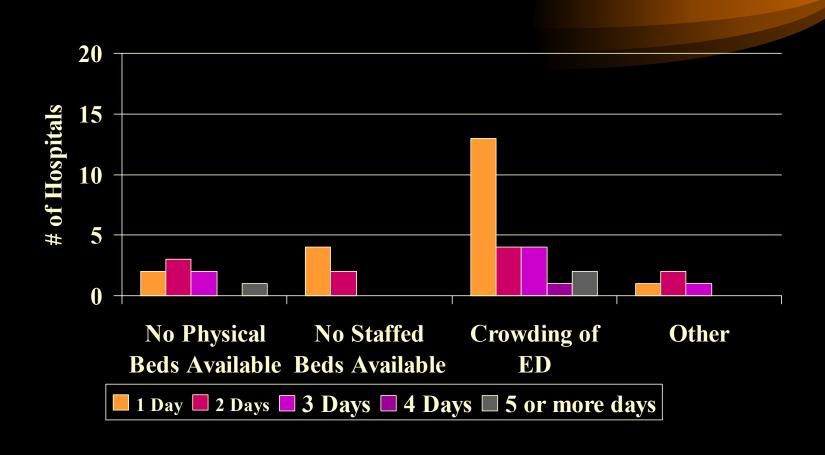
### Occupancy Rate by Diversion Status: Highest and Lowest Occupancy Measures



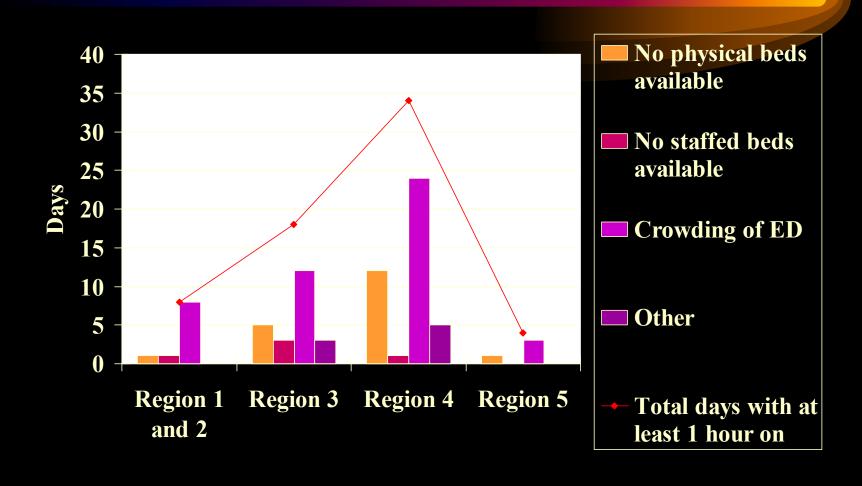
#### Primary Reasons for Diversion



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#### Resources Needed to Alleviate Situation

#### A majority of hospitals responded with at least one of the following:

- Coordination among hospitals is necessary
- Increased RN staffing
- Increased m/s staffing, unit aides/secretaries to facilitate timely discharges
- More telemetry beds, more m/s beds
- Renovations to the ED (many are planning or in the process of), including observation or holding area adjacent to ED to alleviate congestion
- Better third party reimbursement (that "more closely approximates cost of providing services" to be able to fill vacancies, increase staffing

#### Staffing

- Particular stress on ICU/CCU Nursing staffing shortages
- Patient flow is effected by shortage in any nursing area
- Support staffing shortages (e.g., unit secretaries, housekeeping) impede patient flow

If staffing shortages are a major cause of the problem, please describe the specific areas of hospital operation that are most effected (e.g., ICU, CCU, general med/surg, housekeeping, etc.)

- 39 (57%) responded YES, staffing shortages are a major problem
  - 28 specified a shortage of ICU nurses
  - 22 specified a shortage of Medical/Surgical nurses
  - 14 specified a shortage of Emergency Department nurses
  - 10 specified a shortage of telemetry nurses
  - 8 specified a shortage of CCU nurses
- 18 (26%) responded NO, staffing shortages are not a major problem

What criteria does the hospital use when deciding to go on diversion?

• 48 (71%) responded 'no inpatient beds available'

• 28 (41%) responded 'no ED beds available, patients in holding, observation hallways, etc.'

# What specific operational steps have you taken to better manage the problem? Have you used the joint DPH/MHA Best Practices and Measures documents?

- 28 (40%) used the Best Practices and Measures documents, or already had the practices in place prior to the issuance of those documents
- 41 (59%) had a bed management policy and/or daily bed management meetings
- 36 (51%) made nursing or physician staffing adjustments
- 35 (50%) expedite admissions and/or case management of discharges
- 26 (37%) performed renovations (or were planning them), added or converted beds
- 14 (20%) postponed elective surgery or admissions

Describe how you coordinate with other hospitals when you need to go on diversion.

• 44 (64%) contact CMED or the Regional EMS system

• 16 (23%) do not notify either CMED or the Regional EMS organization; they notify other hospitals directly either prior to going on diversion or keep in contact with them during diversion.

### Have you seen an increase in demand for your ED services in the last two years? If so, why?

- 63 (90%) responded YES, they have seen an increase in demand for their ED services
- 28 (40%) indicated the increase was due to closures of nearby facilities
- 20 (29%) indicated the increase was due to an increase in patient acuity
- 20 (29%) indicated the increase was due to a lack of alternative community services
- 14 (20%) indicated the increase was due to the increase in the number of uninsured patients